

(April 7th, 2011)

If you know someone who you think would benefit from being an Insider, feel free to forward this PDF to them so they can sign up here.

Quick tips for our Insider friends!

Hey Insiders!

This bi-weekly Quick Tips is coming to you from the Hard Rock Hotel in Orlando where we're on vacation with the kids after a very successful SQL Connections last week.

Kimberly and the kids are off in Harry Potter World today taking in the rides, but I can't do rides because I get sea-sick, so I get some peace-and-quiet to catch up with a little work before heading down to the pool to catch up with a little reading, tanning, and sampling rum drinks! :-)

Next week we're in Munich, Germany for what begins a wild three months of travel back-and-forth to Europe and around the US for clients and classes.

If you've been following our blogs for a while you'll know we went up into the Russian Arctic last August for two weeks. One of the polar scientists recently came to stay with us and brought us disturbing news of the potential for polar bear hunting to be legalized in northern Russia. Kimberly blogged recently about all of this and we encourage you to read about it in her post.

Please <u>let us know</u> if you liked what you read/saw here and/or have any suggestions for future Quick Tips.

Paul's Ponderings

One of the most widely held myths is that if DBCC CHECKDB comes back clean, then you're guaranteed there are no corruptions.

No.

Let me tell you a story... imagine the Seattle Police Department employs Officer Paul in the Traffic Control Division. His job is to sit in the control room looking at video images of traffic junctions in the city, waiting for a traffic accident to occur (it's a really boring job!). So Officer Paul looks at the image for junction #1. Nothing happens. He presses the button to move to junction #2. As soon as he starts looking at junction #2, there's an accident at junction #1. He won't know until he cycles through all the junctions and arrives back at #1.

This is an analogy of how DBCC CHECKDB sees the pages in the database. Each page is processed once by DBCC CHECKDB. As soon as the page has been processed, it could become corrupt on disk, and you won't know until the next time DBCC CHECKDB runs. All DBCC CHECKDB lets you know is that at the time it read all the pages in the database, there were no corruptions. This is why you need to run regular consistency checks of some kind.

Another variant of this myth is that if a backup completes, it will restore perfectly.

No.

The I/O subsystem is what I call an 'equal-opportunity corruptor':-). If it has problems, it will happily corrupt anything stored on it. You need to have multiple copies of backups and you need to test a full restore sequence regularly. You should always use the WITH CHECKSUM option (from SQL 2005 onwards) and at least run a RESTORE ... WITH CHECKSUM, VERIFYONLY to make sure the backup you just took is valid.

Bottom line: you will all see corruption at some point in your careers - expect it and prepare for it - there are no guarantees, only increased peace of mind.

Check out my <u>Disaster Recovery</u> blog category for some good editorials around this, including an article I just wrote for TechNet Magazine for IT Managers around HA/DR planning and testing and how to fit it into the corporate IT infrastructure.

Video Demo

There's always confusion out there about database physical version numbers, what the CHECKDB messages mean when SQL Server starts up, and where all this stuff is stored. At SQL Connections in March I presented a 400-level session called *Undocumented Tips and Tricks*. One of the demos I do in the session concerns undocumented DBCC commands, which you can use to look at the database boot page, among other things. I thought it would be useful for all of you to see so I expanded the demo with a lot more explanations and recorded a short (12 minutes) video for you.

I produced the video in WMV and MOV formats so everyone can watch. You can get the videos:

For WMV: <u>here</u>For MOV: here

I recommend downloading before watching. And you can get the demo code here, including the log file analysis script I use when auditing a new client's server.

SQLskills Offerings

To round up, we wanted to remind you about our class in <u>Chicago in May</u> (2/3 full) and that we have extra capacity for promotional server health/performance audits now we have well-known performance tuning expert <u>Jonathan Kehayias</u> on board as a full time Senior Consultant. <u>Drop me a line</u> if you're interested.

Summary

I hope you've enjoyed this issue - I really enjoy putting these together.

If there is anything else you're interested in, we'd love to hear from you - drop us a line.

Thanks - Paul and Kimberly